

Application No.: 10/680,049

Docket No.: 103488-0021

**AMENDMENTS TO THE CLAIMS**

This listing of the claims will replace all prior versions, and listings, of the claims in this application.

**Listing of the Claims:**

1. (Currently Amended) A method for identifying related data in a directed graph, comprising:
  - A. executing the sub-steps of
    - (i) identifying as related data substantially matching a criteria;
    - (ii) identifying as related data that is a direct ancestor of data identified in any of sub-steps in step A (i), (ii) and (iii), and that is not in substantial conflict with the criteria;
    - (iii) identifying as related data (hereinafter "identified descendent") that is a direct descendent of data (hereinafter "identified ancestor") identified as related in any of sub-steps in step A (i), (ii) and (iii), and which identified descendent
      - (a) does not have a named relationship with the identified ancestor substantially matching a relationship named in the criteria, if any, and
      - (b) is not in substantial conflict with the criteria;
      - (c) does not have a named relationship with the identified ancestor matching a relationship the identified ancestor has with a data, if any, as a result of which the identified ancestor was identified during execution of sub-step (ii),
  - B. generating an indication of data identified as related in step (A).
2. (Original) The method of claim 1, wherein the criteria specifies a named relationship and a characteristic of that named relationship, and wherein

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sub-step (ii) includes comparing at least one of the relationship and the characteristic named in a criteria with any of

attributes of the direct ancestor, and

a relationship between the direct ancestor and any data that descends therefrom,

in order to determine whether the director ancestor is in substantial conflict with the criteria.

3. (Original) The method of claim 1, wherein the criteria specifies a named relationship and a characteristic of that named relationship, and wherein

sub-step (iii) includes comparing at least one of the relationship and the characteristic named in a criteria with any of

attributes of the identified descendent, and

a relationship between the identified descendent and any data that descends therefrom,

in order to determine whether the identified descendent ancestor is in substantial conflict with the criteria.

4. (Original) The method of claim 1, comprising executing any of the sub-steps of step (A) any of serially, in parallel, or recursively.

5. (Original) The method of claim 1, further comprising executing any of the sub-steps of step (A) using a rule-based engine.

6. (Original) The method of claim 5, wherein the rule-based engine uses a Rete algorithm to effect execution of one or more of the sub-steps of step (A).

7. (Original) The method of claim 1, wherein the directed graph comprises a data flow.

8. (Original) The method of claim 7, wherein the data flow comprises any of transactional information and enterprise-related information.

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9. (Original) The method of claim 1, comprising
- executing step (A) with respect to a first data set representing a first portion of the directed graph, and
- executing step (A) separately with respect to a second data set representing a second portion of the directed graph.
10. (Original) A method of claim 9, wherein the second data set comprises an update to the first data set.
11. (Currently Amended) A method for identifying related data in a directed graph, comprising:
- A. executing the sub-steps of
- (i) identifying as related data substantially matching a criteria;
- (ii) identifying as related data that is a direct ancestor of data identified as related in any of sub-steps in step A ~~(i) and (ii)~~, and that is not in substantial conflict with the criteria;
- B. generating an indication of data identified as related in step (A).
12. (Original) The method of claim 11, wherein the criteria specifies a named relationship and a characteristic of that named relationship, and wherein
- sub-step (ii) includes comparing at least one of the relationship and the characteristic named in a criteria with any of
- attributes of the direct ancestor, and
- a relationship between the direct ancestor and any data that descends therefrom,
- in order to determine whether the director ancestor is in substantial conflict with the criteria.

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13. (Original) The method of claim 11, wherein the directed graph comprises a data flow.
14. (Original) The method of claim 13, wherein the data flow comprises any of transactional information and enterprise-related information.
15. (Currently Amended) A method for identifying related data in a directed graph, comprising:
- A. executing the sub-steps of
- (i) identifying as related data substantially matching a criteria;
  - (ii) identifying as related data (hereinafter "identified descendent") that is a direct descendent of data (hereinafter "identified ancestor") identified in any of sub-steps of step A (i) and (ii), and which identified descendent
    - (a) does not have a named relationship with the identified ancestor substantially matching a relationship named in the criteria, if any. and
    - (b) is not in substantial conflict with the criteria;
    - (c) does not have a named relationship with the identified ancestor matching a relationship the identified ancestor has with a data, if any, as a result of which the identified ancestor was identified as related.
16. (Original) The method of claim 15, wherein the criteria specifies a named relationship and a characteristic of that named relationship, and wherein
- sub-step (ii) includes comparing at least one of the relationship and the characteristic named in a criteria with any of
- attributes of the identified descendent, and
- a relationship between the identified descendent and any data that descends therefrom,

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in order to determine whether the identified descendent ancestor is in substantial conflict with the criteria.

17. (Original) The method of claim 15, wherein the directed graph comprises a data flow.
18. (Original) The method of claim 17, wherein the data flow comprises any of transactional information and enterprise-related information.
19. (Original) The method of claim 15, comprising  
  
executing step (A) with respect to a first data set representing a first portion of the directed graph, and  
  
executing step (A) separately with respect to a second data set representing a second portion of the directed graph.
20. (Original) A method of claim 19, wherein the second data set comprises an update to the first data set.
- 21-41 Cancelled
42. (Currently Amended) A method for identifying related data in a directed graph, comprising:
  - A. executing the sub-steps of
    - (i) identifying as related data that is a direct ancestor of data identified in any of sub-steps of step A (i) and (ii), and that is not in substantial conflict with the criteria;
    - (ii) identifying as related data (hereinafter "identified descendent") that is a direct descendent of data (hereinafter "identified ancestor") identified as related in any of sub-steps of step A (i) and (ii) and which identified descendent
      - (a) does not have a named relationship with the identified ancestor substantially matching a relationship named in the criteria, if any, and

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- (b) is not in substantial conflict with the criteria;
  - (c) does not have a named relationship with the identified ancestor matching a relationship the identified ancestor has with a data, if any, as a result of which the identified ancestor was identified during execution of sub-step (ii).
- B. generating an indication of data identified as related in step (A).